

Course Outline STA452H1

from the private notebook
of
David Brenner
Sept10, 2021

contact info:

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office: Fri. 11-12

lectures:

Wed 10-12, Fri 10-11

ref./text:

Brenner, D. :

FROM THE PRIVATE NOTE BOOK OF
Illustrated adventures in very (very) mathematical
stochastic modelling & statistical inference, 2004-21

Ash, R.B. :

REAL ANALYSIS & PROBABILITY (1972)

Chung, K.L. :

A COURSE IN PROBABILITY THEORY (1968, 1974)

Halmos, P. :

MEASURE THEORY (1950)

topics:

caution: all contents subject to shuffling, merging, expansion
& (really serious) modification

- the multivariate distributions of common statistical practice
- probability, expectation & the LLN
- stochastic convergence: weak, strong and otherwise
- the general linear model: correlation & regression, conditional expectation & bayes' theorem
- characteristic functions, rotational invariance & the cràmer-wold device
- order statistics & permutation invariance

grading (G) :

test 1 (T_1) = 30 - Wed. Oct. 20

test 2 (T_2) = 30 - Wed. Nov. 17

final (F) = 40 - Dec. 10-21

$$G = T + F$$

(NOTE: tests T_1 & T_2 during class time.)